# NO ACTION ALTERNATIVE AND NO ACTION VARIABILITY BASELINE

**December 6, 2005** 

## PURPOSE OF CONFIGURATION

The No Action Alternative and No Action Variability Baseline provide a basis for the evaluation of impacts of the other proposed configurations. The No Action Alternative includes mitigation measures identified in the Imperial Irrigation District (IID) Water Conservation and Transfer Project, including mitigation measures for desert pupfish, and air quality management of the exposed seabed. This alternative does not stabilize the Sea's salinity or elevation, nor would it provide additional new habitat. The "No Action Variability Baseline" includes the same features as the No Action Alternative; however, it shows how the alternative would function under a lower future inflow scenario (i.e., average annual inflows about 650,000 acre-feet).

# DESCRIPTION OF CONFIGURATION AND FACILITIES NEEDED

The No Action Alternative and the No Action Variability Baseline include facilities to support air quality management and habitat replacement/connectivity for desert pupfish. There are no other habitat improvements in this alternative. The following major features are included in this alternative:

- ❖ Sea/Brine Sink: The Sea will continue to serve its existing function as an agricultural repository. With no active management, salinity will continue to increase to greater than 200,000 milligrams per liter (mg/L) from its current salinity of about 48,000 mg/L. Evaporation will continue to exceed inflows causing the elevation to decline over time and the Sea to decrease in surface area.
- ❖ Pupfish Connectivity: Direct drains to the Sea will be intercepted by a lower drain connection canal to provide connectivity between drains for desert pupfish. These, or other actions as defined by the Pupfish Technical Committee, will be implemented before the Sea salinity reaches 90,000 mg/L.
- ❖ Air Quality Management: Water will be diverted at the mouths of the New and Alamo Rivers and distributed to irrigation systems to reduce air quality impacts due to emissive playas. Air quality management will be implemented on exposed playa below -235 feet mean sea level (msl) on areas determined to be emissive.

## **HOW THE CONFIGURATION WORKS**

❖ A portion of the inflow from the New and/or Alamo Rivers would be diverted to canal systems around the Sea for air quality management. A subsurface irrigation system to support salt tolerant vegetation is proposed. To achieve the target salinity for irrigation water, river water may be blended with saline water supplied from subsurface well systems or from the Sea.

- The air quality management will not be implemented in this alternative until the Sea elevation is below -235 feet msl.
- When the Sea (Brine Sink) salinity is above 90,000 mg/L, direct drains to the Sea will be intercepted by a lower drain connection canal to provide connectivity between drains for desert pupfish.

# CAN THE NUMBER OR COMPLEXITY OF FACILITIES BE REDUCED?

This alternative includes only the minimum facilities required to implement mitigation measures in the IID Water Conservation and Transfer Project. However, it is possible that the infrastructure to support the air quality management could be simplified in the future. For instance, if the exposed playa is not emissive, then the need for irrigated vegetation or other dust controls would be reduced, water requirements for air quality management would be lower, and the elevation of the Salton Sea would be higher. Water supplies to meet air quality management needs are not likely to be limiting in this alternative.

#### **Main Characteristics After 75 Years:**

#### Based on inflows of 958,000 acre-feet

#### Sea/Brine Sink:

- Salinity much greater than 200,000 mg/L
- Elevation -249 feet msl
- Surface area 170,000 acres

# **Air Quality Management:**

- Total area of exposed playa 63,000 acres (48,000 below -235 feet msl)
- Area with irrigated vegetation 24,000 acres (50 percent of total area below -235 feet msl)

Estimated Capital Cost: \$1.1 billion

#### Based on inflows of 650,000 acre-feet

#### Sea/Brine Sink:

- Salinity much greater than 200,000 mg/L
- Elevation -263 feet msl
- Surface area 124,000 acres

## **Air Quality Management:**

- Total area of exposed playa 108,000 acres
- Area with irrigated vegetation 54,000 acres (50 percent of total area)

Estimated Capital Cost: \$1.9 billion



